

Paphiopedilum josiana^a

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Abstract

The plant hitherto known as *Paphiopedilum* (formerly *Cypripedium*) *concolor* var. *longipetalum* is elevated to the species level and described as *Paphiopedilum josiana* Braem & Nimpoonsri in honour of Mrs. Josiane Guiard.

Résumé

Paphiopedilum josiana – La plante connue jusqu'ici sous le nom de *Paphiopedilum* (anciennement *Cypripedium*) *concolor* var. *longipetalum* est élevée au rang d'espèce et décrite comme *Paphiopedilum josiana* Braem & Nimpoonsri, en l'honneur de Mme Josiane Guiard.

Introduction

After having published the second edition of the monograph on the genus *Paphiopedilum* (Braem *et al.*, 2014), we realised that we had overlooked a “distinct variety” of *Paphiopedilum concolor* which was dealt with in detail by Olaf Gruf and Prapanth Iamwiriyakul in an article for *Die Orchidee* (Gruf & Iamwiriyakul, 2006).

In 1896, the famous Robert Alan Rolfe (1855-1921) described a new plant as *Cypripedium concolor* var. *longipetalum* in volume 4 of *The Orchid Review* (Rolfe 1896). Rolfe recognised that the plant, collected in 1894, was related to *Cypripedium concolor*, but reported that it was “remarkably distinct in

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shape". The variety was included in F. Desbois's monograph of all slipper orchids (Desbois 1898) two years later, and transferred to the genus *Paphiopedilum* by the German botanist Ernst Pfitzer in A. Engler, *Das Pflanzenreich*, IV, 50, Heft 12: 57 (1903).

Little was heard of this member of the genus for more than a century. A few years ago, the plant appeared again on the markets of Asia, and the plants available at this time were collected near the border of Myanmar and Thailand in the area referred to as the Tanintharyi Division (formerly Tenasserim) and Olaf Gruss and Prapanth Iamwiriyakul (Gruss & Iamwiriyakul, 2006) superfluously transferred the taxon to the genus *Paphiopedilum*, obviously overlooking the Pfitzer's publication of 1903. Unfortunately, the *faux pas* was not noticed by many, and The International Plant Names Index (IPNI, 2014) erroneously lists the variety as *Paphiopedilum concolor* var. *longipetalum* Gruss & Iamwiriyakul.

Results

Recently, enough information was made available for a critical review of the taxon, and the conclusion was reached that the population of this taxon in the wild is quite variable in respect to flower morphology (Fig. 1). Although it is evident that the plant is closely related to *Paphiopedilum concolor* (Bateman) Pfitzer (Fig. 2), the differences between *P. concolor* and its "variety *longipetalum*" are at least as distinct as those between the generally recognised species pairs *P. anitum* / *P. adductum*, *P. lynnianae* / *P. lowii*, *P. parishii* / *P. dianthum*, *P. philippinense* / *P. roebbelenii*, *P. godefroyae* / *P. leucochilum*, and others.

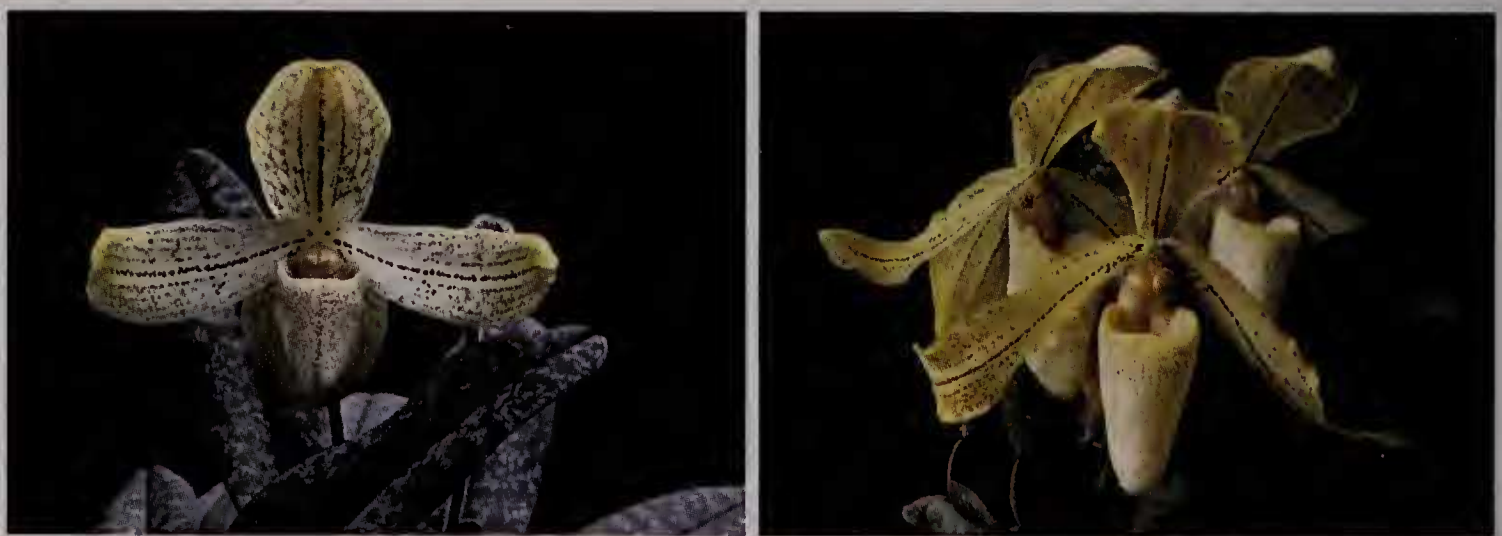


Fig. 1: *Paphiopedilum josianae*, 2 different forms



Fig. 2: *Paphiopedilum concolor*

The main difference is the size and form of the petals: whereas the petals of *Paphiopedilum concolor* are elliptic to oblong-oval, those of *P. josianae* are elliptic to narrowly elliptic and about twice as long as in *P. concolor*. Furthermore, *Paphiopedilum josianae* forms distinct autonomous populations, and obviously is a distinct, genetically stable entity.

For that reason we have decided to elevate *P. concolor* var. *longipetalum* to the species level, naming it in honour of Mrs. Josiane Guiard of Voreppe, France.

Paphiopedilum josianae* Braem & Nimpoonsri, *stat. et nomen nov.

BASIONYM

Cypripedium concolor var. *longipetalum* Rolfe
in *The Orchid Review*, 4: 54 (1896)

SYNONYMS

Paphiopedilum concolor var. *longipetalum* (Rolfe) Pfitzer.

in A. Engler, *Das Pflanzenreich*, IV, 50, Heft 12: 57 (1903)

Paphiopedilum concolor var. *longipetalum* (Rolfe) Gruß & Iamwiriyakul,
nomen superfl.

in *Die Orchidee*, 57(1); 70-72 (2006)

Description

Paphiopedilum josianae is an herbaceous plant, generally growing in pockets of decaying vegetable matter on calcareous rock. Its leaves are elliptic to

narrowly elliptic, up to 15 cm long by 2.5 to 3.5 cm wide. They are tessellated dark and whitish green, obtuse and bifid at the apex, densely spotted purple on the underside, giving that surface an almost uniformly purple appearance.

The inflorescence is up to 8 cm high and generally carries a single flower. Pedicel, flower bract, and ovary are green, spotted purple, and hirsute (Fig. 3). The pedicel is 2.5 to 4.5 cm long, the flower bract is approximately 2 cm long, and the ovary is about 3.2 cm long.



Fig. 3: *Paphiopedilum josiana*, pedicel, flower bract and ovary

Overall, the flower is 6 to 7.3 cm across, dark cream, spotted purple on petals, sepals and pouch. On the inner surface of the dorsal sepal and petals there is a distinct, dense midline formed by the purple spotting. The spotting on the flower varies greatly, but the dense midline is always present. The dorsal sepal is up to 4 cm long by 1.5 to 2.3 cm wide, oval. The synsepal is up to 3.7 cm long and equally oval. The petals are narrowly elliptic to elliptic, 4 to 5 cm long by 1 to 1.7 cm wide, pendulous to nearly spreading horizontally, but in most specimens hitherto seen, the petals are

spreading at an angle of about 45 degrees to the vertical axis of the flower. The labellum is conical, shaped like an elongated slipper, deeply saccate, more or less pointed, overall to 3.5 cm long by 1.3 to 1.6 cm wide. The staminode (Fig. 4) is heart-shaped with a pointed apex, and the bilobed upper part thickened with a distinct center cleavage, 8 to 9 mm long by 7.5 to 8.5 mm wide, light ochre.

References

Braem, G.J., G.Chiron & S.Öhlund, 2014. *Paphiopedilum*. Moorland eBooks.

Desbois, F., 1898. *Cypripedium, Selenipedium & Uropedium* – Monographie comprenant la description de toutes les espèces, variétés et hybrides existant jusqu'à ce jour. Ghent, Belgium.

Gruß, O. & P.Iamwiriyakul, 2006. *Paphiopedilum concolor* var. *longipetalum*, eine lange unbeachtete Varietät wieder in Kultur. *Die Orchidee*, 57(1): 70-72.



Fig. 4: *Paphiopedilum josianae*, staminode

INPI, 2014. The International Plant Names Index. Published on the Internet <http://www.ipni.org> [accessed 1 April 2014].

Pfitzer, E., 1903. *Paphiopedilum concolor* var. *longipetalum*. In A. Engler, *Das Pflanzenreich*, IV, 50, Heft 12: 57.

Rolfe, R.A., 1896. *Cypripedium concolor* var. *longipetalum*. *The Orchid Review*, 4: 54.

photographies :

Fig. 1, 3 & 4: Dr. Nimpoonsri

Fig. 2: courtesy of Jerry Fischer (Orchids Limited)

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